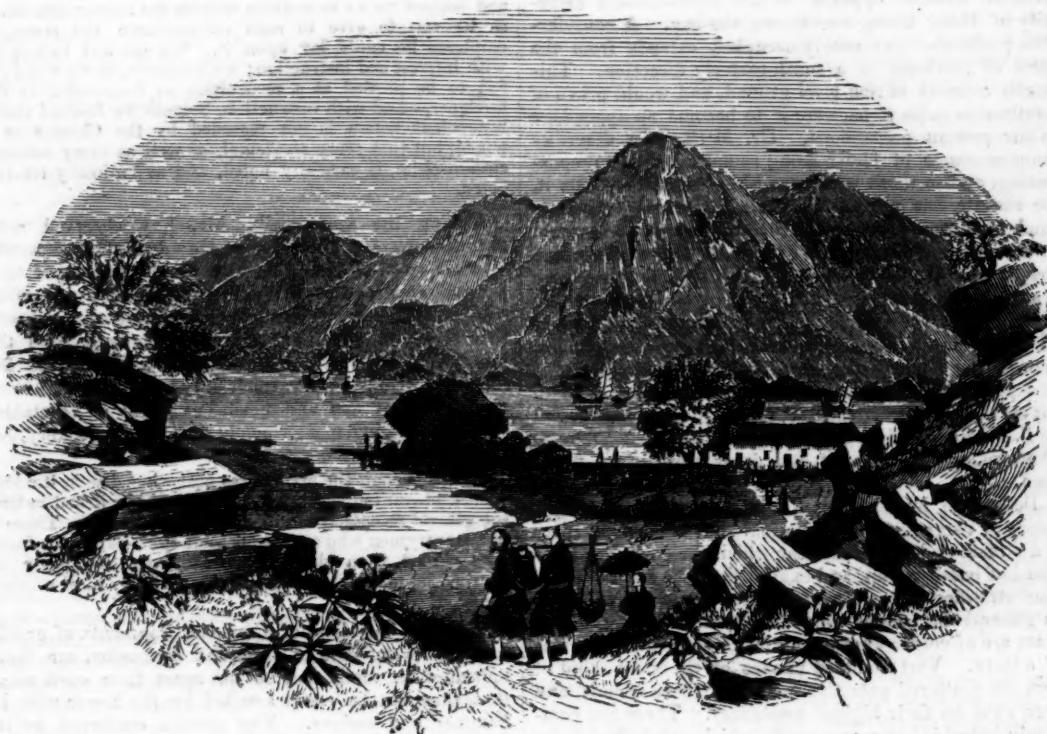




HONG KONG



THE NEIGHBOURHOOD OF HONG KONG.

THE Portuguese town of Macao, which has long been falling into decay, has received its final blow by the establishment of the British settlement of Hong Kong. This new seat of our eastern commerce is noticed very favourably by the most competent judges.

Hong Kong forms the most northerly of the group of islands at the mouth of the estuary that leads to Canton. It is in lat. $22^{\circ} 17' N.$, and long. $114^{\circ} 12' E.$ It is distant from Macao about thirty-five or forty miles, and from Canton about a hundred. The island is about eight miles in length, and from two to five in its greatest breadth. The strait which separates it from the mainland is, in some places, barely a mile in breadth, while at others it is five and six miles broad. The bay of Hong Kong is situated between the north-western extremity of the island and the mainland. The usual entrance is by the Lamma channel; but there is also a narrow and deep passage round the eastern end of Hong Kong, passing close to Cowloon. This bay cannot probably be surpassed by any in the world, not only by reason of the great number of ships which it can accommodate, but also of its safe anchorage, compared with any other harbour in China, and the depth of water close to the land, which along the greater part of the bay is sufficient for a seventy-four to float at a distance of a cable's length from the shore. From this circumstance alone, the island must prove a valuable commercial acquisition. The bay is formed by a high island, and the mainland about Cowloon, or properly Kowlung. In this name the word *Kow*, which commonly stands for nine, has the signifi-

cation of winding or zig-zag, and applies to a winding range of hills upon the mainland, which fancy has likened to a dragon (*lung*), stretched in various curvatures upon the ground. Hong Kong is a corruption, or rather a provincial mode of pronouncing *Heang-keang*, the *fragrant stream*, that winds along the valleys, or tumbles gracefully over the shelving rocks in its passage to the sea.

The island abounds with magnificent granite quarries, so that warehouses on any scale can be built close to the water's edge, and wharfs easily thrown out, which will enable ships to approach for the purpose of loading and unloading. An abundant supply of fresh water is always to be procured. In other respects this new colony possesses but few advantages. Its northern side is formed by a connected ridge of mountains, the highest of which is about two thousand feet above the level of the sea. Except in a few spots, these mountains are barren and uncultivated, formed by black projecting masses of granite; the intervals giving shelter to herbage and brushwood. There are no fine trees; and, unlike the generality of mountainous districts, it possesses but few valleys, and these not of great extent. The mountains, for the most part, fall perpendicularly into the sea, thus leaving but little space for building at their base. The interior and south side is chiefly formed by level and undulating land, and appears to be far better adapted for private residences than the north side. Here, too, there are some very fine bays, the chief of which are Ty-tan and Chuck-pie-wan. At the former place a military

post has been established. The latter place, which is about five miles from Ty-tan, forms a very convenient and well-sheltered site for building dock-yards, &c. Partridge, quail, and snipe, have been found in the island; and in the jungle pheasants and deer have been seen.

When the English took possession of this island the population was not much above three thousand, but now it is said to amount to nearly fifteen thousand. The inhabitants are industrious and easily managed, and have changed their rulers without any marks of dissatisfaction.

The town of Cowloon is a small fortified Chinese position, situated opposite to the north-eastern extremity of Hong Kong, and across the bay. A considerable peninsula, but poorly occupied, extends from the town of Cowloon, in a south-easterly direction. This mostly consists of rich level ground, and would prove of inestimable value to us, were it to become an appendage to our present possessions. Dr. McPherson describes the appearance of Hong Kong as anything but prepossessing, and to those who have hitherto resided upon it, the climate has proved far from salubrious. There is much rank vegetation on the face of the hill, the ground on which, after a heavy fall of rain, becomes elastic and boggy. On the Cowloon side of the bay the atmosphere is at all times more pure, and the changes of temperature less sudden; indeed, altogether it appears a far more likely and preferable spot in which to form a settlement, than on the Hong Kong side. It had been decided that this peninsula was to be considered as neutral ground, but on the Chinese breach of faith, Cowloon was seized by the British and a garrison placed in Fort Victoria, where many commissariat and other stores were deposited.

Before we leave Hong Kong we may give a slight notice of its geological formation. In this island there is a stream and waterfall, near which the rocks are composed of basaltic trap, and exhibit in some places a distinct stratification, in others, an arrangement in columns. In general the islands which surround this part of the coast are of coarse granite only, with perpendicular veins of quartz. Vast rounded masses of the same kind of rock are scattered over the surface of these islands, and even exist on their highest eminences. These are commonly imbedded in coarse earth, which, washed away by the winter rains, leaves them without support, so that they roll down on all sides, and stud the sandy shores and shallows with a belt of rocks confusedly heaped together.

Mr. Lay gives a pleasing account of the inhabitants of the mainland near the harbour of Hong Kong. They are represented as being friendly to foreigners, not from motives of self-interest, but from real kindness of heart. In one of his visits to this place, Mr. Lay was accompanied by a surgeon who had been in the habit of dispensing advice and medicine gratuitously among the native population. They sauntered along the beach until they came to a cottage, when they rested for a few minutes on a seat outside the door, and requested the cottager to oblige them with a little water to allay their thirst. The good-nature and simplicity of the cottagers gave them pleasure, and soon they found a circle of the neighbours gathering round them. One of these recognised the surgeon, and being endowed with a natural share of elocution, forthwith introduced him to the company as the skilful and humane benefactor of the suffering Chinese.

A short time before this a woman of some standing and respectability at Cowloon, had applied to this gentleman for relief in a dropsical complaint, and being wisely anxious to ensure success, he invited her on board the *Hercules*, with one or two of her relatives. On board this ship the necessary operation was performed, and the patient nursed in a cabin by herself, amidst the attendance and comforts of the kindest hospitality, till her health was re-established, when she was allowed to return and share in the hearty congratulations of all her friends and neighbours.

Of this fact the assembled company were ignorant,

until this man enlightened them on the subject, and at the same time displayed his own oratorical powers.

By way of preparation the orator laid down a bundle which he carried upon his back, and mounted a log of wood that lay at a most convenient distance for the purpose. He then, with a great deal of pantomimic effect, proceeded to describe the state of the patient when she visited the doctor, the manner which he received her, the nature and details of the operation she underwent, the tenderness and generosity with which she was nursed, and lastly, the joy of herself and friends at meeting after an event so unexpected and so propitious. The man had fully mastered his case, and seemed to be as anxious to state the matter accurately as he was to give to each circumstance the strongest emphasis he could lay upon it. We sat and looked on with interest and instruction; with interest, as we could not fail to be pleased at a recognition so honourable to the foreigner,—and with instruction, because we learned that a benevolent action is not regarded by the Chinese as a whole, but that every accidental, as well as every essential circumstance, is carefully noted, and as faithfully remembered.

During the same walk, Mr. Lay observed some granite-hewers at their work. He was invited to partake of their meal of rice, &c., with which they sipped from a very small teacup, undiluted *samshoo*, an ardent spirit. But their hale and cheerful countenances showed that they did not suffer any inconvenience from this practice, which this writer accounts for from the fact that they drink this hot spirit only with this meal, made up in part of fish and flesh, but chiefly of vegetables, which, according to a principle of Chinese cookery, had been well sodden in water.

Hence, though the arrack was neat when drunk, it underwent a liberal tempering with moisture after it had entered the general receptacle of life-supporting aliment. Those of our countrymen who cannot lay aside spirit-drinking, should take a hint from the Chinese labourer, and never use distilled liquors, except with, or immediately after a hearty meal.

Near the mainland of Cowloon, fragments of granite rock, of every kind of form and dimension, are found imbedded in sand, and so far apart from each other that they can be easily assailed by the hewer with his hammer and wedges. The process employed by the Chinese granite-hewers is thus described:—

In attempting the removal of a scantling from one of the natural blocks, the workman relies mainly upon the effect of percussion. He first draws a line by means of an ink thread, which he manages with his hand and foot without the help of a second person. After this line is delineated in conspicuous tints, he proceeds with hammer and chisel to make holes about a foot apart from each other along the course of the same. This is a tedious business, but not more so, perhaps, than every stone-cutter in this country meets with among the various processes of his work. When the holes are deep enough, he inserts a small wedge, which he knocks out by a single blow with a large iron beetle. This is repeated till he has passed from one end of the line to the other, three or four times in succession, when, to his surprise, the stranger sees the hard rock part asunder as if it were only a piece of limestone. After a block has been removed in this way, he cuts it up into slabs by a renewed application of the hard chisel and the iron hammer, the wedge, and the iron maul, or beetle.

These slabs require to be hewn and modelled after they have been conveyed to their destination. The hammer and blunt chisel are used in this operation. The temper of Chinese tools seems to be of little importance, and repeated grindings are unnecessary, inequalities being removed by a sort of bruising operation. The fragments which are broken off in hewing the granite rocks, are used as ballast for foreign ships, and also for native craft. These fragments are conveyed to the sea-side in a very primitive kind of wheel-barrow, the wheel of which is high, and the handles so wide apart that it requires "the utmost fathom of the arms to reach them."

The cataracts of Hong Kong, which seem to have given the name to the island, are formed by the water of a considerable stream, which falls down a series of ledges in its progress towards the sea. The principal cataract is about sixty feet in height, and stands at the termination of a valley, within a nook of the shore. The spot, according to Mr. Lay, has a strange but not unlovely appearance. The surface of the rocks near the waterfall exhibits an appearance like a rude piece of mosaic. At the top of the cataract the stream is delightfully fringed in many places with a variety of plants, and the loveliness of the vegetable kingdom contrasts pleasingly with the wild and deeply-riven passages through which the water flows. The waterfalls decrease in height and breadth as the traveller follows the windings and steep ascents which occur in the river's course.

In the course of his visits to Hong Kong Mr. Lay had frequent opportunities of noticing the admiration of the Chinese for the fair complexion of foreigners. This is a personal charm which they are themselves most anxious to possess, and therefore the gentlemen court the shade, and the ladies paint.

Among the visitors at the harbour of Hong Kong was the lady of a mercantile captain, who used occasionally to go ashore for the sake of that recreation which a walk over the hills and dales at eventide is sure to yield, when the parties have any taste for the beauties of nature. The sight of a foreign lady at this place was a great novelty, and attracted a crowd of spectators; but those who gazed with the deepest interest were the females, as if charmed with the honour which such an example of well-proportioned features and fair complexion conferred upon their own sex in general. On one occasion I saw this lady seated upon a grassy knoll of a little hill, with her baby in her arms, and surrounded by native women, who seemed to be in a trance of admiration at a spectacle so interesting.

On one of the islands near Hong Kong a curious mode of fishing attracted the attention of our traveller. A stage or apparatus is erected on a shelf of the rock, by which a net is raised or depressed at pleasure. A framework is secured for the accommodation of a windlass or barrel, on which the ropes are wound or unwound. The levers by which this windlass is turned, are fastened together so that each set resembles a wheel which the fisherman turns with his feet and his hands as he is seated on the beach. The ropes that wind round this barrel lead to stakes which are stuck in the mud at the bottom of the shallow sea, so that the weight of the net extended between them bows their heads below the surface of the water whenever these ropes are relaxed for that purpose. In this case the net is so far immersed that the fish can overpass its sides, and disport in the basin formed by the sinking down of the net in the middle. As soon as they find their motions obstructed by the meshes, they endeavour to make their escape by diving down into deeper water. This vain attempt only gives notice to the fisherman, who advances softly in a boat from beneath the cliff, while his companions begin to draw up the net so as to allow of his taking out the captured fish. He then retires to his hiding place, and the net is let down as before.

OBSERVATIONS ON BEES.

PASSING through one of my orchards rather late in the evening, in the month of August, I observed that several bees passed by me in a direct line from the hives in my own garden, to those in the garden of a cottager, which was about a hundred yards distant from it. As it was considerably later in the evening, than the time when bees usually cease to labour, I concluded that something more than ordinary was going forwards.

Going first to my own garden and then to that of the cottager, I found a very considerable degree of bustle and agitation to prevail in one hive in each; every bee as it arrived, seemed to be stopped and questioned at the mouth of each hive; but I could not discover anything like actual resistance, or hostility, to take place, though I was

much inclined to believe the intercourse to be hostile and predatory. The same kind of intercourse continued in a greater or less degree during eight succeeding days, and though I watched them very closely, nothing occurred to induce me to suppose that their intercourse was not of an amicable kind. On the tenth morning, however, their friendship ended, as sudden and violent friendships often do, in a quarrel, and they fought most furiously; and after this there was no more visiting.

I have some reason to believe that the kind of intercourse I have described, which I have often seen, and which is by no means uncommon, not unfrequently ends in a junction of the two swarms; for one instance, not many years ago, came under my observation, in which the labouring bees, under circumstances perfectly similar to those I have described, wholly disappeared, leaving the drones in peaceable possession of the hive, but without anything to live upon.

On the farm which I occupy there were formerly many old decayed trees, the cavities of which were frequently occupied by swarms of bees; and when these were destroyed a board was generally fitted to the aperture which had been made to extract the honey; and the cavity was thus prepared for the reception of another hive, on the ensuing season. Whenever a swarm came I constantly observed that about fourteen days previous to their arrival, a small number of bees, varying from twenty to fifty, were every day employed in examining, and apparently keeping possession of the cavity, for if molested they shewed evident signs of displeasure, though they never employed their stings in defending their proposed habitations.

Their examination was not confined to the cavity, but extended to the external parts of the tree above; and every dead knot particularly arrested their attention, as if they had been apprehensive of being injured by moisture, which this might admit into the cavity below; and they apparently did not leave any part of the bark near the cavity unexamined. It not unfrequently happened that swarms of my own bees took possession of these cavities, and such swarms were in several instances followed from my garden to the trees; and they were observed to deviate very little from the direct line between the one point and the other; which seems to indicate that those bees which had formerly acted as purveyors, now became guides.

It has been remarked, by Mr. John Hunter, that the matter which bees carry on their thighs is the farina of plants with which they feed their young, and not the substance with which they make their combs; and his statement is, I believe, perfectly correct: but I have observed that they will also carry other things on their thighs. I frequently covered the decorticated parts of trees, on which I was making experiments, with a cement, composed of bees'-wax and turpentine; and in the autumn I have observed a great number of bees employed in carrying off this substance. They detached it from the tree with their forceps, and the little portion thus obtained, was then transferred from the first to the second leg, by which it was deposited on the thigh of the third: the farina of plants is collected and transferred in the same manner.

This mixture of wax and turpentine did not, however, appear to have been employed in the formation of their combs; but only to attach the hive to the board on which it was placed, and to exclude other insects, and air during the winter. Whilst the bees were employed in the collection of this substance, I had many opportunities of observing the peaceful and patient disposition of them as individuals, which Mr. Hunter had also, in some measure, noticed. When one bee had collected its load, and was just prepared to take flight, another often came behind it, and despoiled it of all it collected. A second, and even a third load was collected, and lost in this manner, and still the patient insect pursued its labour, without betraying any symptoms of impatience or resentment.

[THOMAS ANDREW KNIGHT. 1807.]

THE disagreeable events, and the troubles, incident to human life, both wean us from an immoderate love of this world, and raise the hopes and desires to better objects, and soften the heart of man for the reception of the gentle affections, of affability, humanity, civility, pity, condescension, and officious kindness; and prevent or remove a certain narrow, selfish, and uncompassionate disposition, which often attends great health and a flow of prosperity.—ARCHDEACON JORTIN.

EASY LESSONS ON REASONING.

LESSON IV.

§ 1. We have seen that when an Argument is stated in the regular form, (as in the foregoing examples,) which is what is properly called a "Syllogism," the validity [or conclusiveness] of the reasoning is manifest from the mere form of the expression itself, without regard to the sense of the words: so that if letters, or other such arbitrary unmeaning Symbols, be substituted, the force of the argument will be not the less evident. Whenever this is not the case, the supposed argument is either sophistical and unreal, or else, may be reduced (without any alteration of its meaning) into the above form; in which form, the general Maxim that has been laid down will apply to it.

What is called an unsound [or fallacious] argument (that is, an *apparent*-argument which is in reality *none*) cannot, of course, be reduced into such a form. But when it is stated in the form most nearly approaching to this that is possible, and especially when unmeaning Symbols (such as Letters,) are substituted for words that have a meaning, its fallaciousness becomes evident from its want of conformity to the above Maxim.

§ 2. Let us take the example formerly given: Every criminal is deserving of punishment; this man is not a criminal; therefore he is not deserving of punishment: this, if stated in letters, would be "every X is Y; Z is not X; therefore Z is not Y." Here, the term ("Y," "deserving of punishment") is affirmed universally of the Class (X) "criminal;" and it might therefore, according to the Maxim, be affirmed of anything comprehended under that Class: but in the instance before us, *nothing* is mentioned as comprehended under that Class; only "this man" ("Z") is *excluded* from that Class. And although what is affirmed of a whole Class may be *affirmed* of anything which that Class does contain, we are not authorised to *deny* it of whatever is *not* so contained. For it is evident that what is truly affirmed of a Class, may be applicable *not only* to that Class, but also to *other things* besides.

For instance, to say that "every tree is a vegetable" does not imply that "nothing else is a vegetable." And so also, to say that "every criminal is deserving of punishment," does not imply that "no others are deserving of punishment:" for however *true* this is, it *has not been asserted* in the proposition before us. And in analysing an argument we are to dismiss all consideration of what *might* have been asserted with truth, and to look only to what *actually* is laid down in the Premises.

It is evident therefore that such an apparent argument as the above does not comply with the Rule [or Maxim] laid down; nor can it be so stated as to comply with it; and it is consequently invalid.

§ 3. Again, let us take another of the examples formerly given; "All wise rulers endeavour to civilize the People; Alfred endeavoured to civilize the People; therefore he was a wise ruler." The parallel example to this, was, "All vegetables grow; an animal grows; therefore it is a vegetable." And each of these, if stated in Symbols, would stand thus "Y is X," [or the thing denoted by Y is comprehended under the Class for which X stands] "Z is X; therefore Z is Y."

Now in such an example, the quality of "growing" [X] is, in one Premise, affirmed universally of "vegetable," ["Y"] and it *might* therefore have been affirmed of anything that can be referred to the Class of "vegetable" as comprehended therein: but then, there is *nothing* referred to that Class, in the other Premise; only the same thing which had been affirmed of the Class "vegetable," is again affirmed of another Class, "animals;" (Z) whence nothing can be inferred.

Again, take such an instance as this; "food is necessary to life; corn is food; therefore corn is necessary to life." Here, "necessary to life" is affirmed of "food,"

out not *universally*; for every one would understand you to be speaking not of "all food," but of "*some* food," as being "necessary to life." So that, expressed in Symbols, the apparent-argument would stand thus: "Some X is Y; Z is X; therefore Z is Y;" in which you may see that the Rule has not been complied with; since that which has been affirmed not of the *whole* of a certain Class, [or, not *universally*] but only of *part* of it, cannot on that ground be affirmed of whatever is contained under that Class.

§ 4. There is an argument against miracles by the well-known Mr. Hume, which has perplexed many persons, and which exactly corresponds to the above. It may be stated thus: "Testimony is a kind of evidence more likely to be false, than a miracle to be true;" (or, as it may be expressed in other words, we have more reason to expect that a witness should lie, than that a miracle should occur) "the evidence on which the Christian miracles are believed, is testimony; therefore the evidence on which the Christian miracles are believed is more likely to be false than a miracle to be true."

Here it is evident that what is spoken of in the first of these Premises, is, "*some* testimony;" not "all testimony;" [or *any whatever*], so that this apparent-argument has exactly the same fault as the one above. And you are to observe that it makes no difference (as to the point now before us) whether the word "*some*" be employed, or a different word, such as "*most*" or "*many*," if it be in any way said or implied that you are *not* speaking of "*all*." For instance, "*most* birds can fly; and an ostrich is a bird," proves nothing.

§ 5. In order to understand the more clearly, and to describe the more accurately, the fallaciousness of such seeming-arguments as those of which we have just given examples, and also, the conclusiveness of the sound arguments, it will be necessary to explain some technical words and phrases which are usually employed for that purpose. This is no less needful (as was remarked in Lesson i.) than for an Artisan to have certain fixed and suitable names for the several instruments he works with, and the operations he performs.

The word "*Proposition*," (which we have already had occasion to use) signifies "a Sentence in which something is *said*—[or predicated]—that is, *affirmed* or *denied*—of another." That which is spoken of, is called the "*Subject*" of the proposition; and that which is said of it, is called the "*Predicate*;" and these two are called the "*Terms*" of the Proposition; from their being (in natural order) the *extremes* [or boundaries] of it.

You are to observe that it matters not whether each of these Terms consist of *one word*, or of several. For whether a Proposition be short or long, there must always be in it, *one*—and but *one*—thing of which you are speaking; which is called (as has been just said) the Subject of it: and there must be (in any *one* Proposition) *one thing*,—and *only one*—that is affirmed or denied of that Subject: and this, which we thus affirm or deny of the other, is called—whether it be one word or more—the Predicate.

§ 6. You are to observe also that tho', (in our language) the Subject is usually placed *first*, this order is not at all essential. For instance, "it is wholesome to rise early," or "to rise early is wholesome," or "rising early is wholesome," are only three ways of expressing the same Proposition. In each of these expressions, "rising early," (or "to rise early," for these are only two forms of the Infinitive) is what you are speaking of; and "wholesome" is what you say [or *predicate*] of it.

When we state a proposition in *arbitrary Symbols*, as "X is Y," it is understood that the first term ("X") stands for the Subject, and the last ("Y") for the Predicate. But when we use terms that are *significant*, [or, have a meaning] we must judge by the *sense* of the

words *which* it is that is the Subject, and which, the Predicate; that is, we must ask ourselves the question "What am I speaking of? and what am I saying of it."

For instance, "Great is Diana of the Ephesians;" here "great" is evidently the Predicate. Again "Thou art the man;" and "Thou hast given occasion to the enemies of the Lord to blaspheme;" by asking yourself the above question, you will perceive, that, in the former of these examples, "Thou" is the Predicate, and in the latter, the Subject.

§ 7. That which expresses the affirmation or denial, is called the "*Copula*." For instance, if I say "X is Y," or "X is not Y," in each of these examples, "X" is the Subject, and "Y," the Predicate; and the Copula is the word "*is*," in the one, and "*is not*," in the other.

And so it is, in sense, tho' not always in expression, in every Proposition. For either the Affirmative-copula, "*is*," or the Negative-copula, "*is not*," must be always, in every Proposition, either expressed in those words, or implied in some other expression.

Any Sentence which does not do this—in short, which does not *affirm* or *deny*—is not a *Proposition*. For instance, of these sentences, "are your brothers gone to school?" "they are not gone;" "let them go," the second alone is a Proposition; [or "Assertion"] the first being a *Question*, and the last a *Command*, or *Request*.

MAUNDAY THURSDAY.

On the day before Good Friday, usually called Shrove, or Maunday Thursday, it was a custom both in this and other countries, for the kings and queens, persons of high estate, and abbots of religious houses, to perform their Maunday; that is, to wash the feet of a certain number of poor people, frequently *twelve*, in imitation of our Saviour washing the feet of his disciples. The kings and queens of England, indeed, increased the number, and usually washed the feet of as many persons either as they themselves were years old, or had reigned. They afterwards gave them meat, clothing, and a little bag of small money.

King James the Second was the last of our kings who washed the feet of the poor people in person. The author of *Le Guide de Londres pour les Etrangers*, 1693, informs us that King William the Third was the first of our sovereigns who deputed the performance of this ceremony to his almoner. From the Earl of Northumberland's *Household Book*, began in 1512, we find that he kept his Maunday, if at home, for as many poor men as he was years of age. Wolsey also, in 1530, performed the same ceremony at the Abbey of Peterborough, while on his journey to the north. "Upon Palme Sunday," says Cavendish, "he bare his palme, and went in procession with the monks, setting forth the divine service right honorably, with such singing men as he then had there of his own. And upon Maunday Thursday he had his Maunday there, in our Lady's Chapel, having *fifty-nine* poor men whose feet he washed and kissed; and after he had wiped them, he gave every one of the said poor men twelve pence in money, three ells of good canvass to make them shirts, a pair of new shoes, a cast of red herrings, and three white herrings; and one of these had two shillings."

It may not be quite unconnected with the subject to state that the Maunday is likewise used at the present day in the Greek Church. Dr. E. D. Clarke, in his *Travels in Russia*, says, "The second grand ceremony of this season takes place on Thursday before Easter, at noon, when the Archbishop of Moscow washes the feet of the apostles. This we also witnessed. The priests appeared in their most gorgeous apparel. Twelve monks, designed to represent the twelve apostles, were placed in a semicircle before the archbishop. The ceremony is performed in the Cathedral, which is crowded with spectators. The archbishop, performing all, and much more, than is related of our Saviour in the 13th chapter of St. John, takes off his robes, girds up his loins with a towel, and proceeds to wash the feet of them all, until he comes to the representative of St. Peter, who rises; and the same interlocation takes place as between our Saviour and that Apostle."—ELLIS'S *Original Letters*.

LETTERS TO THE READER.

No. VI.

MY DEAR READER,

THE poet says that "Heaven lies about us in our infancy." Blessed parents, indeed, strove through years of care to make my early home an earthly heaven, by calming the strife of tongues—by the self-sacrifice of unselfishness,—by denying my hurtful wants,—by teaching love with love,—by associating pleasure with the visible creation, and peace with moral beauty. But does every British child enjoy an equal blessing? The holy training of my childhood—did I owe it to the intelligent piety of my parents, or to the institutions of the land? In part to both. Conviction of the all-important value of these conditions leads to the desire of widening their field of action.

A recent *Report upon the Physical and Moral Condition of the Children and Young Persons employed in Mines and Manufactures*, informs us that thousands of children in "Christian England" are altogether without the means of instruction; that their tender bodies are exposed to unheard-of hardships; that their minds contain fewer ideas than perhaps the human mind was ever known to possess except in idiocy; that their spiritual faculties and affections are subservient to this mental ignorance and physical degradation! This is a national disgrace more truly humiliating than defeat in war; but any expressions of sorrow must be weak compared with the force of the facts themselves. I will, therefore, present you with an abridgment of the official *Report*, classing as follows the principal statements which it contains:—

Depressed state of Children and Young Persons employed in British Mines and Manufactures, considered with respect to their	physical conditions of	employment,
		food,
	mental poverty of ideas concerning	clothing,
		dwelling,
	moral relations of	cleanliness.
		numbers.
		places,
		persons,
		Christianity
		parents,
		companions,
		government,
		religious institutions.

Employment commences at a tender age. Instances occur in which children, in several districts female children, are taken into the coal-mines to work as early as at the age of five. From eight to nine is, however, the ordinary age; but a very large proportion of the persons thus engaged is under thirteen years. At the calcining furnaces of copper-works, in South Wales, both boys and girls regularly work with the men twenty-four hours consecutively, on alternate days, without excepting Sunday. This labour is sometimes extended to thirty-six, and even to forty-eight hours. In trades and manufactures, children, in some cases, begin to work when only three and four years old; not unfrequently at five, and are generally in regular employment between seven and eight. Female children are hired out almost equally with boys, and at the same tender ages. The growth of both becomes stunted. Lads of fifteen and sixteen years of age are no larger than ordinary English school-boys, and not so strong and healthy. Moreover, this early servitude involves the necessary neglect of almost all intellectual and religious culture.

The labour is excessive. That of the youngest colliers begins at day-break, when they enter the mine, which they are not allowed to leave till night. Sometimes they remain in darkness and solitude during the whole time they are in the pit, and many of them do not see the light of day for weeks together, during the greater part of the winter season, except on holidays and Sundays. From six years, and upwards, the hard work of pushing and dragging the carriages begins. Both

sexes are set to the same kind of labour for an equal number of hours. In the east of Scotland a much larger proportion of children and young persons are employed in the coal mines than in other districts; many of these are girls, and the chief part of their labour consists in carrying the coals, on their backs, up steep ladders. Their daily full employment is rarely less than eleven hours, more frequently twelve, and sometimes even more. In the majority of these mines night-work is part of the ordinary system of labour. No regular time is set apart either for meals or rest.

In the operations connected with blast furnaces for reducing the ores of iron, the children invariably work at night during alternate weeks, and continue at work, without any interruption whatever, for four and twenty hours during every other Sunday.

In mines in Derbyshire, the hours of work are commonly fourteen, and are sometimes extended to sixteen, out of the twenty-four. The poor boys complain of great fatigue. John Hawkins, aged eight, "never wants to play." George Pollard "is always too tired to play." Aaron Chambers, aged eleven, "never plays from one week's end to another; he is too tired without play." The state of children in the Yorkshire mines is told almost in the same words. "I wish," said the parent of some young North Lancashire colliers, "you could see them come in, they come as tired as dogs, and throw themselves on the ground like dogs; we cannot get them to bed." Sometimes the powers of the body are so exhausted, that the stomach has no strength left for digestion, and food is constantly rejected. The tender and feeble powers of girls and boys of eight years old, and under, are taxed to the extreme in the coal mines of East Scotland; "it takes away the desire for food, as it is o'er sair."

In trades and manufactures the regular hours of work, done by children and young persons, in some few instances, does not exceed ten, but more commonly they are twelve, and often fifteen, sixteen, and even eighteen hours consecutively. In almost every instance they work as long as the adults. In "winding" for lace machines, there is no regular time set apart either for sleep or recreation. The young Scotch nail-makers are described as infant slaves, who evince the nature of their toil by their emaciated looks and stunted growth; clad in apparel, which few paupers would be found begging in; without even a change of rags, and starved into quickness, by receiving their meals in proportion to work done.

The severity of the labour, the almost constant night-work, the short intervals for sleep, the irregular meal-hours, and the intense heat of the place of work, render the occupation of glass-making extremely injurious to children. The hottest department of the glass-house varies in temperature from 300° to 330° Fahrenheit; that of boiling water being 212°.

Evils incidental to employments. Many of the subterranean passages in coal mines are so small, that even the youngest children can only crawl along them on hands and feet. In this unnatural position they drag loaded carriages after them. The ventilation and drainage of many mines are lamentably defective. The state of the iron-stone pits, in these respects, is inferior to coal mines.

Where "fire damp" prevails in mines, the air is unfit for respiration. Carbonic acid gas exists, in considerable quantities, in the lead mines of Alston Moor. This, together with the gases which are formed during the blasting of the rock by gunpowder, make the atmosphere almost irrespirable by a stranger.

The children employed in the potteries suffer from the excessive labour of lifting up large lumps of clay and throwing them down forcibly on a hard surface, to free the clay from air, and render it compact. With scarcely an exception, these young workers are pale, thin, stunted

in growth, weak, and otherwise unhealthy. They have also to dip the ware in a liquor containing large quantities of lead, and frequently arsenic. The hands being constantly wet with this solution, absorption takes place, and slow poisoning ensues.

The unhealthy conditions of the glass-house have been noticed above. The nature of the occupation of making lace by machinery, is stated to be exceedingly injurious to children. The constrained position and stooping of the body, cramps the chest and stunts the growth. At one part of the process called "lace running" they frequently faint whilst at work, and become totally unfitted for even common household duties.

Food. The exhausting employment of collier children does not always bring with it even a sufficient supply of food. They are often pinched at the end of the week. James Taylor, a poor boy, unconsciously describes the state of but too many like himself.

He used to take his dinner down with him *when he had any*, and eat it as he could, working. Many a time has gone without both breakfast and dinner altogether, and felt sick like and mazy. His mother has now't (nothing) to give him, because she could na' get now't. Hur (she) said if hur could get a bit for him, hur would do; but his father, who was a collier, *drank a good deal of his wages*. Oftener went to the night-set without his butter cakes, than with them, and felt sick and mazy then. Has porridge and treacle to breakfast *when he has any*; bread and butter cakes to dinner *if he can get them*; and porridge and milk when he comes home; *never any potatoes, or any bread, but what is in his bread and butter cakes*.

The children who work at Leadhills, Scotland, scarcely ever touch flesh-meat. So small is the consumption of animal food, that there is no butcher in the place. The insufficient time allowed for the meals of growing children, employed in mines and manufactories, is an evil of the greatest magnitude. The long and irregular hours of work of the Nottingham, Derby, and Leicester lace-makers, deprives them of their meal-time. Besides which their food is only bread and tea. They pass one and two months together without tasting animal food. With some exceptions, the food of young milliners is coarse in quality and insufficient in quantity. Where a sufficient supply of solid food cannot be obtained, a delusive comfort is sought for in the stimulus of tea.

The Birmingham children are in a deplorable state as to food and clothing. At Wolverhampton the young people are often fed upon bad meat. There are butchers who deal exclusively in diseased meat; horse flesh is sold for beef steaks, and bad fish is purchased cheap, as a treat for the apprentices.

The clothing of the collier children of Lancashire and Cheshire, is often rags in a disgusting state of dirt. Few of them have any dress but that used by the mines, and are therefore ashamed to attend either a school or public worship. Only one out of all the children examined at Warrington, had a suit of Sunday clothes. The Irish colliers are said to change their clothes only once a week. The children engaged in manufactures at Wolverhampton are miserably clad. No constant difference is made between winter and summer clothing. Of the children belonging to the tobacco manufactures in Scotland, it is said that nakedness, hunger, shortness of stature, filth, scrofulous tumours, all combine to render their youth the prelude to a vicious and wretched manhood.

The dwellings of the miners are but too often deficient in neatness and cleanliness; but much of this is caused by the bad construction of their cottages. Few subjects are more important to the health and comfort of a working population, than the situation, structure, and drainage of their houses. Those attached to the Hirwain works, South Wales, are mere mud cabins, in many instances a deserted cow-shed converted into a human habitation. They are built in hollows to avoid the wind, and thus receive the drainage from surrounding lands. Even the

school more resembles a stable than a place for education, and is almost surrounded with a ditch of dirty water. In Lancashire and Cheshire, the colliers' houses are usually filthy. No attention is paid to whitewashing, or ventilation. The beds and bedding are generally poor. The windows are badly kept, not cleaned, and paper and rags often stuffed into broken panes.

The "lodging shops" for miners, which are common in some parts of the Alston Moor district, are close, crowded, and filthy beyond description. One room, eighteen feet by fifteen, contained fourteen beds. Seven of these beds were supported immediately over the other seven, and each, at times, receives two men and a boy. The boy lies across the foot of the bed. There were blankets, but no sheets. No opening whatever was contrived for the exit of foul air. The beds were stuffed with chaff.

Fever, when once in a North Welsh collier's house, generally runs through the family, and in crowded villages, through all the families. This is ascribed to the smallness of the cottages, the want of ventilation, the total neglect of external cleanliness and drainage; the floors being on a level with the ground, and the pigsty and dunghill close to the door.

The wretchedness of the dwellings of the manufacturers at Sedgely is almost unparalleled. Birmingham enjoys an extraordinary freedom from fever, because its soil is favourable for drainage, and each poor family has for the most part, a distinct, and usually comfortable dwelling.

Cleanliness. Much improvement has taken place in this respect during the past few years: but something yet remains to be done. The squalid aspects of the homes and persons of the colliers of East Scotland bespeak a population neglected and abandoned to a course of life which has blunted the commonest principles of human comfort. In parts of Wolverhampton a want of cleanliness is an obvious and constant source of disease.

None of the drawers (said a drawer of coal from the Lancashire and Cheshire district) ever wash their bodies. I never wash my body. I let my shirt rub the dirt off. My shirt will show that. I wash my neck, and ears, and face, of course. My sisters never wash themselves. When a collier is in full dress he has white stockings, low shoes, and very tall shirt-neck, very stiffly starched, and ruffles; but they never wash their bodies underneath. Their legs and bodies are as black as your hat.

It is not considered worth while to wash over-night what is to be dirtied again in the morning.

Such are the main physical conditions against which some thousands of English children are at present struggling. It remains for me to trace the effects of these upon them in after life, as well as to describe the state of their intellectual and moral relations. It would be impossible for me to do justice to these details in the present letter; but the following number of the *Saturday Magazine* shall contain the remainder of the subject.

Believe me still your sincere well-wisher, F.

WHAT though at birth we bring with us the seed
Of sin, a mortal taint,—in heart and will
Too surely felt, too plainly shown in deed,—
Our fatal heritage; yet are we still
The children of the All Merciful; and ill
They teach, who tell us that from hence must flow
God's wrath, and then his justice to fulfil,
Death everlasting, never-ending woe:
O miserable lot of man, if it were so!

Falsely and impiously teach they who thus
Our heavenly Father's holy will misread!
In bounty hath the Lord created us,
In love redeemed. From this authentic creed
Let no bewildering sophistry impede
The heart's entire assent, for God is good.
Hold firm this faith, and, in whatever need,
Doubt not but thou wilt find thy soul endued
With all sufficing strength of heavenly fortitude.

SOUTHEY.

ON THE HOUSELEEK.

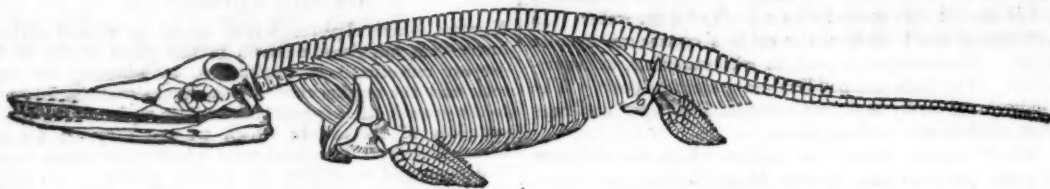
NATURE, whose slightest works cannot be viewed without instruction, has given a lesson in this plant worthy of the deepest reflection. It teaches us, by selecting the bare rock and the sloping roofs of houses as situations favorable to the growth of this vegetable, not to repine at our lot, or complain of the soil in which we are thrown; for the *houseleek* gathers its nourishment where other plants would find none, and maintains the cooling quality of its pulpy leaves on the burning tiles of our buildings. The lesson is also applicable to the agriculturist. It tells him to seek vegetation suitable to his soil, rather than complain of the earth he cannot change. The heavy clay that produces such excellent wheat would yield a watery potato, a root more delicious when grown in sandy ground, where bread-corn would fail of coming to perfection for want of nourishment.

Find out the nature of the mould with care,
And what is proper for each soil to bear.—VIRGIL'S *Georgics*.

The *houseleek* gives but little trouble in its cultivation. Every cottager who has a cover for his head, has a bed for this plant, and after it is once planted in mud or strong earth, and placed on a wall or the shelving of his dwelling, it will continue to thrive. It will increase rapidly by offsets, each of which forms a kind of green rose, and throws out, at maturity, a stem resembling a palm-tree in miniature, from the top of which spring star-shaped flowers worthy the inspection of either the florist or the botanist.—PHILLIPS.

THE BATHS AT CARLSBAD.

WERE it not for the fatigue attendant on so early a commencement of the labours of the day, the morning promenades would be highly agreeable and amusing. Here were all ages, and ranks, and kindreds, and nations; and many a sovereign prince, not creating nor subjected to the formalities of Toplitz, but presenting his cup, as best he might, to the youthful naiads of the fountain. Some few servants in livery might be seen, especially about the Muhlbrunn, conveying to and fro the cups of their ladies; but this was a matter of necessity rather than of choice, so dense was the crowd which generally surrounded the favoured source. The physicians flitted about from patient to patient on the walks; and people met each other, and formed a kind of temporary intimacy as they compared the results of their respective experiences; and idled away the intervening periods between the potations in wandering from spring to spring, or strolling about the gardens of the Theresienbrunn, or in perambulating the long covered colonnade above the Tepel, to the sound of the splendid harmonies of Beethoven and Mozart. Except the English, who are always behind-hand when early hours are imposed, very few stragglers were seen about the springs later than eight o'clock. Exercise must then be taken for an hour, in order to "digest the waters;" after which I always found myself in excellent disposition for breakfast and repose. The scene from our windows on the Wiese was at this time delightful. A sort of fashion prevails of breakfasting in the open air; and groups of ladies and children, the inmates of the neighbouring houses, were assembled to take their tea or coffee around tables spread beneath the trees. The Grand Duchess Helena was very fond of this sort of rural ease; and always, when the weather permitted, we might see her thus engaged, with her three young daughters and her two brothers, the Princes of Württemberg, while the Grand Duke strolled up and down, occasionally joining his family. After the breakfasts, the work-box would sometimes be brought; and ladies would pay their visits from table to table, and exchange a greeting with their passing friends. Two is the hour for dinner. Some may dine at one and some at three, but the usual time is two; an hour which I always found to arrive far too soon after breakfast. There are no tables d'hôte; or, if there be any, they are attended only by the inferior classes of visitors. The generality of persons dine *à la carte*, individually or in parties, at some one of the numerous hotels and restaurants; and one of these, the Salle de Saxe—a spacious saloon at the extremity of the Wiese, and which serves for the purposes also of balls and evening assemblies—is then crowded to excess. This is the principal and most expensive place of fashionable resort; yet here, at the price of one florin, (two shillings,) a good dinner is provided.—TURNBULL'S *Austria*.



THE ICHTHYOSAURUS, OR FISH LIZARD.

As many of our readers have no opportunity of seeing the fossil remains of this gigantic reptile, we intend giving a brief description of it, but, before doing so, it may be necessary to explain the meaning of the term *fossil*. The word is derived from the Latin verb *fosse*, "to dig," and formerly signified anything dug out of the earth: minerals and organic remains were alike called fossils, the latter being distinguished as *extraneous* fossils.

Organic remains were also known as *PETRIFACTIONS*, from two Latin words signifying a *conversion into stone*, but the term *fossil* is now generally applied to those remains of animals and plants that are found imbedded in the earth, the pores of some of which have been so penetrated by earthy or stony substances, that the consistence appears to be entirely changed, while others are preserved almost in their natural state; an instance of which occurred some years ago, when a lily *encrinite*, an extinct species of zoophyte resembling a lily resting on its stalk, was found imbedded in a limestone rock, with the flesh adhering to its bones. These fossils are supposed to have existed at a very remote period, which supposition is supported by the fact, that many of those found in the lower *strata*, or beds of earth, have not now a single living representative.

Among these is the *ICHTHYOSAURUS*, which derives its name from the Greek words, *ichthys*, a fish, and *saurus*, a lizard. This extraordinary creature greatly resembled the lizard tribe, partaking at the same time of the nature of a fish. Seven species have been found, all of great size, the largest being upwards of forty feet in length. Its snout resembled that of a porpoise, its head was like the lizard's, having two long slender jaws, each furnished with upwards of eighty sharp conical teeth, shaped like those of the crocodile; while the cavity for the eye, in some specimens, exceeded fourteen inches in diameter. The head of an ichthyosaurus, formerly in the possession of a gentleman at Bristol, measured ten feet in length; being joined to the body by a very short neck. The body was arranged on a long spinal column, composed of more than one hundred *vertebræ*, or joints, similar to those of a fish, to which a quantity of ribs were attached, and terminating in a long broad tail, which, it is conjectured, possessed great strength. Instead of the feet with which the lizard and crocodile are furnished, the ichthyosaurus had four paddles, resembling those of the whale, which enabled it to move through the water in the manner of that animal; the breast-bone and fore paddles were similar to those of the *ornithorynchus*, or water mole, an aquatic quadruped found in New Holland, which enabled it to descend to the bottom of the water in search of food. Thus, it will be seen, the ichthyosaurus presented a most singular combination of forms: it had the snout of a porpoise, the teeth of a crocodile, the head of a lizard, *vertebræ* like a fish, the breast-bone of the *ornithorynchus*, and the paddles of a whale.

As the form of the *vertebræ* by which it is associated with the class of fishes, seems to have been introduced for the purpose of giving rapid motion in the water to a lizard inhabiting the element of fishes, so the further adoption of a structure in the legs, resembling the paddles of a whale, was superadded, in order to convert these extremities into powerful fins. The still further addition of a *furcula* and

clavicles, like those of the *ornithorynchus*, offers a third and not less striking example of selection of contrivances, to enable animals of one class to live in the element of another class*.

A most important discovery was made, some years ago, at Lyme Regis, by Professor Buckland. He had frequently observed numerous stony bodies, resembling kidney potatoes, lying near the remains of the ichthyosaurus, which, upon close examination, were found to be the refuse of that animal, petrified as hard as the most compact marble. These bodies, which the learned Professor has called *coprolites*, from *kopros*, dung, and *lithos*, a stone, were found to contain the scales, teeth, and bones of fishes, which appeared to have passed undigested through the body, similar to the fragments of bones that are found undigested in the refuse of the ravenous *hyæna*. Dr. Buckland also found in one of these stones the *vertebræ* of an ichthyosaurus which he calculates must have been four feet in length at least: thus showing that these remarkable creatures not only preyed upon their weaker neighbours, but actually devoured the smaller individuals of their own kind.

In all these various formations (says Dr. Buckland) the *coprolites* form records of warfare waged by successive generations of inhabitants of our planet on one another, and the general law of nature, which bids all to eat and to be eaten in their turn, is shown to have been co-extensive with animal existence upon our globe, the *carnivora* in each period of the world's history, fulfilling their destined office to check excess in the progress of life, and maintain the balance of creation.

We have thus obtained a distinct idea of the nature of a very important part of the bodily economy of this long extinct race of animals. Remains of the ichthyosaurus have been found in all the *strata* called by geologists, the *secondary formation*, but are more frequently met with in the *Lias* limestone, at Lyme Regis in Dorsetshire.

We would recommend those of our readers who have an opportunity, to visit the British Museum, where they will see specimens of the ichthyosaurus as they were found imbedded in limestone; but to those who cannot spare the time, this brief account may serve to convey an idea of this curious relic of a former period, which so highly illustrates the handy works of that ALL-POWERFUL BEING who "made heaven and earth, the seas, and all that in them is." J. G. C.

* BUCKLAND'S *Bridgewater Treatise*, Vol. I., p. 187.

THE defects of the older steed may be compensated by the energies of the young rider, whereas the violence of the young horse requires to be moderated by the cold temper of the older.—WALTER SCOTT.

WHOEVER would proceed in the right path, must be attentive to the dangers on each side.—ARCHBISHOP SECKER.

THE approach of the parting hour is saddening, and the thoughts which in happier moments we give to the tongue, the heart refuses to part with then.—LOVER.

JOHN W. PARKER, PUBLISHER, WEST STRAND, LONDON.